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ABSTRACT

Patterns of alcohol usage and related behavior of students at West Chester State College were detemined from a survey of 177 resident students enrolled during the 1978 spring semester. A 34-item questionnaire was used and drinking patterns in terms of preference, frequency, and amount were statistically analyzed in relationship to sex and class standing. Age of initial contact with alcohol, reasons for drinking, and behavioral results of alcohol abuse were studied. Results show that 90 percent of the students used alcohol. There were no sex differences concerning use and non-use. Males preferred beer, while females chose wine or liquor. Men started to drink earlier and in greater amounts per sitting than females. No significant differences between class standing and the usage of alcohol were found. Reasons given for using alcohol were to enhance sociability, relieve anxiety or fatigue, and for the taste. Findings indicate that alcohol abuse led to illness and accidents for more than half the students sampled and resulted in interpersonal conflicts, trouble with the law, and interference with study and class attendance. (Author/SPG)

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A SURVEY OF STUDENT ALCOHOL USE AT WEST CHESTER STATE COLLEGE

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SOCIETAL FACTORS

by

Louis F. Weislogel

West Chester State College

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EASTERN PENNSYLVANIA

A PRACTICUM PRESENTED TO NOVA UNIVERSITY IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF EDUCATION

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ABSTRACT

A SURVEY OF STUDENT ALCOHOL USE AT
WEST CHESTER STATE COLLEGE

by

Louis F. Weislogel

Societal Factors Eastern Pennsylvania Cluster

A major problem facing society is alcohol abuse. This societal problem is reflected on campuses throughout the country. Colleges need to become concerned with educational programming in the responsible use of alcohol.

The study's purpose was to determine patterns of alcohol usage and related behavior of students at West Chester State College. A survey using a 34 item questionnaire was conducted. Subjects were 177 resident students enrolled during the 1978 spring semester. Drinking patterns in terms of preference, frequency, and amount were statistically analyzed in relationship to sex and class standing. Age of initial contact, reasons for, and behavioral results of alcohol abuse were studied.

Results showed that 90 percent of the students used alcohol. There were no sex differences concerning use and non-use. Males preferred beer, while females chose wine or liquor. Men started to drink earlier and in greater amounts per sitting than women. Males also drank beer with greater frequency than females. No significant differences between class standing and the usage of alcohol were found.

Reasons for using alcohol were to enhance sociability, relieve anxiety or fatigue, and for the taste. Findings indicated that alcohol abuse led to illness and accidents for more than half the students sampled and resulted in interpersonal conflicts, trouble with the law, and interference with study and class attendance.

Results of the study led to a recommendation that further research be conducted concerning the reasons for alcohol use and resultant behaviors from overindulgence. Another recommendation called for the development of an alcohol awareness educational program.

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INTRODUCTION

One of the major problems which our society is attempting to deal with at the present time is alcohol abuse. When one considers a few facts, the enormity of the problem becomes apparent. For example, persons with alcohol problems now number an estimated ten million (National Institute of Alcohol Abuse and Alcoholism, 1975). It is estimated that alcohol misuse and alcoholism cost the American society an estimated twenty-five billion dollars annually in lost productivity, health and medical costs, property damages, welfare, and criminal justice system costs (National Institute of Alcohol Abuse and Alcoholism, 1974).

This societal problem is reflected on college and university campuses throughout the country. Student affairs administrators have long been aware of students on campus whose use of alcohol, whether continuous or periodic, results in behavior that disrupts their relationship with school, family, and society. This abuse is manifested in vandalism, fights, driving while drunk, or health problems. In reporting on a nationwide study conducted by the National Institute on Alcohol Abuse and Alcoholism, Kraft (1976) states that alcohol abuse is a common problem on campus at most schools, especially student drunkenness and related physical, social, and property damage. However, there remains little empirical evidence and data concerning the true picture of the use and abuse of alcohol on college campuses. The research that has

been completed shows a disparity of results from campus to campus. Although these findings indicate extensive alcohol usage, the true rate remains unknown.

While there has been increasing discussion and concern over the problem of alcohol abuse at colleges and universities, there remains relatively little data available on the topic. There is a need to encourage the college community to focus on this issue and to stimulate new education and communication efforts to facilitate a solution to this societal problem. In order to develop alcohol awareness and educational programs for college students, it is necessary to have a data base on the extent and variety of alcohol use on campus. It is also imperative to determine the reasons why students overindulge and the results of this abuse in order to develop meaningful educational programs.

As a consequence, this study was undertaken to collect data about the drinking practices and attitudes of college students. The purpose of this study was to determine patterns of alcohol usage and related behavior of college students at West Chester State College. Specifically, the study attempted to collect data about three aspects of the problem: (1) the extent and frequency of use of alcoholic beverages, (2) reasons for drinking, and (3) the behavioral results of excessive drinking.

A survey using a questionnaire was conducted to collect the data. Subjects in the study were students living in the residence halls at West Chester State College during the spring semester, 1978. Data obtained from the survey was tabulated on a numerical and percentage basis and statistic-

ally analyzed using the Chi Square, Kruskal-Wallis, and Mann-Whitney U tests.

The investigation addressed itself to a number of research questions. The analysis focused on the differences in sex and class standing as they related to: a preference for beer, wine, and liquor; the frequency with which these alcoholic beverages were used; and the amount of these beverages consumed at any one time. Sex differences in the age of initial alcohol contact were also studied. In addition, the reasons for drinking and the resultant behavior from alcohol abuse were examined and reported.

The study was an attempt to present data which could serve as a background for the development of an alcohol awareness and education program in the residence halls at West Chester State College. The results will also serve as a resource for formulating an institutional position on problems of alcoholism and alcohol abuse by college age students.

BACKGROUND AND SIGNIFICANCE

One of the biggest social problems in the country today is the abuse of alcohol. A few statistics can point out the seriousness of the problem and the way it affects so many of today's human and social concerns.

The National Institute on Alcohol Abuse and Alcoholism (1974) (1975) reported that an estimated ten million people have an alcohol abuse problem. Another thirty-six million Americans can be regarded as caught in the web of alcohol abuse--unhappy marriages, broken homes, desertion, divorce, impoverished families, deprived and displaced children. About 45 percent of all fatally injured automobile drivers have a blood alcohol concentration of 10 percent or higher. One-third of all suicides are alcohol related. Alcohol figures in approximately one-half of all arrests in the United States. An association with alcohol has been found in 64 percent of all murders, 41 percent of all assaults, and 34 percent of all forcible rapes. Finally, the annual loss in production, health and medical costs, property damage, welfare, and criminal justice system costs is estimated at twenty-five billion dollars a year.

These national figures are reflected in statistics relating to Pennsylvania. A report of the Special Senate Committee to Investigate Pennsylvania's Drug Laws showed that alcohol abuse remains the number one "drug problem" in the state. The study showed more than one million persons in the

state abused alcohol (Daily Local News, 1977).

Statistics indicate the number of drinkers in the United States has increased noticeably since 1940. It is not surprising that the drinking frequency among young people has also increased. According to a report by the federal government, the proportion of American youth who drink has increased so that it is almost universal. The highest scores on an index of possible problem drinking behaviors were recorded in the 18-20 age group (U.S. Department of Health, Education and Welfare, 1974).

Alcohol is the "drug of choice" for college students today just as it has been for decades. Student use of alcoholic beverages is certainly not a recent phenomena. Alcohol abuse has been recorded as a perennial problem in colleges and universities in America since 1642 (Brubacher and Rudy, 1958). Leonard (1956) writes that as early as the eighteenth century, alcohol use was mentioned with appropriate admonitions.

Surveys conducted by the National Institute on Alcohol Abuse and Alcoholism indicate that from 70-95 percent of the nation's college and university students drink to some extent, and the proportion of drinkers is increasing (Kraft, 1976). Kuder and Madson (1976) have found that a large majority, 85 percent, use alcoholic beverages. This does not mean that most college students are alcoholics or problem drinkers, although some clearly are. What is most significant about campus drinking, writes Kraft (1976), is not that most of our college students use alcohol, but that many use a significant amount at times, and that few consider the possible implica-

tions of their drinking behavior.

During the last ten or fifteen years, student affairs administrators have been very much concerned with the problems caused by the use of marijuana and other drugs by students. There is, however, a growing opinion in educational circles that there has been a switch from drugs to alcohol over the last few years, and that there has been an increase in alcohol use and abuse. Several recent studies have noted a changing pattern in the attitudes and behavior of college students toward alcohol and drug use. Students' tastes have been shifting away from drugs, popularized during the sixties, to more traditional substances such as alcohol (Fago and Sedlacek, 1975). Surveys conducted by a national magazine and a public opinion pollster indicate a renewed interest by students in alcohol consumption (Playboy,1971; and Gallup, 1972).

During the sixties, educators were primarily concerned about the use of marijuana, LSD, and other illegal drugs. With the increase of drug usage which occurred during that period, the issue of alcohol consumption became secondary to most college administrators. While alcohol is scientifically classified as a drug by most public health agencies, current professional literature does not show much concern towards the fact that alcohol is a dangerous drug. An extensive review of the literature by Bowker (1975) indicates a great deal of research has been conducted concerning drug abuse on college campuses, but relatively little of it has focused on alcohol abuse. Most of the studies reviewed on drug use either completely ignored the use and abuse of alco-

hol, or treated it as an issue of secondary importance. When compared to marijuana, the same studies, however, demonstrated that the use of alcohol far exceeds that of marijuana.

Published and unpublished research indicated that the national rate for marijuana "ever used" by college students is between 40 and 50 percent (Chipman and Packer, 1972). Strimbu, Schoenfeldt and Sims (1973) reported that 52.6 percent of the males studied were regularly using alcohol as compared to 18.3 percent who were using marijuana. This same study showed that 36.8 percent of females were using alcohol on a regular basis on contrast to 11.3 percent who reported regular use of marijuana. Research on this topic by Fago and Sedlacek (1975) also demonstrated the wider use of alcohol as compared to marijuana. The percentage of incidence and regular use of alcohol among freshmen and transfer students was almost double that of marijuana.

Alcohol abuse is one of the biggest social problems on campus today at most schools. It is within the residence halls that the problem of alcohol abuse is most acutely perceived. The problem has become increasingly evident to the residence life staff at the college. While casual and social drinking is common, the staff has noted the disturbing frequency of property destruction, fighting, and general rowdiness and noise caused by excessive drinking.

A review of the cases adjudicated by the campus judicial system reflects the problem of alcohol abuse in the residence halls. A total of 67 cases were brought before the Central Board in 1976. Among those cases, 65 percent were directly related to the illegal possession and use of alcohol

or excessive noise and disrupting conduct resulting from the use of alcoholic beverages. In addition, eight of the nine cases that involved suspension from the residence halls were from the result of alcohol abuse.

Reports by the campus law enforcement department also indicate a rise in alcohol related problems. The number of criminal citations issued by the campus police during the 1976-77 school year for disorderly conduct increased 36 percent over the previous year. According to the officers issuing the citations, most were for underage drinking, illegal possession, and public drunkenness.

At the same time that the use and abuse of alcohol is increasing among young people, there is growing pressure to lower the drinking age. Currently in the state legislature there is a bill that would lower the drinking age in Pennsylvania to nineteen. The bill, Senate Bill 252, passed the Senate in May, 1977 by a vote of 27 to 21, but failed in the House by 10 votes. The bill will be coming up again for a vote in the near future. If the bill passes the House, it will lower the drinking age from twenty-one to nineteen for all types of alcoholic beverages.

As in many cases, where proposed legislation will affect young people, college administrators are looked upon to provide guidance to the government and other agencies of society. In general, the problem is that college officials do not have the empirical data available to analyze the situation and make recommendations.

In evaluating research on alcohol and drug use, Horowitz and Sedlacek (1973) write that such research suffers

from a host of methodological problems, not the least of which are sampling problems, which limit generalizations, and gathering accurate information on activities when subjects may be reluctant to be honest because of illegal or social sanctions.

There have been numerous studies of alcohol use by college students in the last few years. Most of these studies included several demographic variables in their analyses. The existing research on the relationship of sex and class standing with the use of alcohol presents varied conclusions.

In the literature pertaining to alcohol usage by college students, a great amount of attention has been paid to sex as a variable, although the results are far from being conclusive. A number of studies (Smith, 1970; Dvorak, 1972; Levy, 1973; Walsh and Frantz, 1972) found no significant differences between the sexes in alcohol use; whereas, an equal number of studies (Anker, Milman, Kahan, and Valenti, 1971; Mitchell, Kirby, and Mitchell, 1970; Gusfield, 1970; Gallup, 1972; Milman and Su, 1973; Playboy, 1971; Strimbu, Schoenfeldt, and Sims, 1973) indicate a greater use of alcohol among males than females.

DeCoster, Engs, Larson, and McPheron (1976), in a survey of over 4000 students, reported that 87.1 percent of all students drank alcoholic beverages. When broken down by class, the survey showed that 81.4 percent of the freshmen, 88 percent sophomores, 90.8 percent juniors, and 91 percent seniors used alcohol. Similar findings by Gusfield (1970) indicated that alcohol use rises from the freshman to the senior year. Fago and Sedlacek (1975) reported that as stu-

dents become older they begin to drink on a more regular basis, particularly hard liquor. However, findings by others demonstrated mixed patterns (Gallup, 1972; Levy, 1972). Briggs, Orcutt and Bakkenist (1974) found that a student's year in college was not related to alcohol use. In summarizing the literature on the relationship between college class and alcohol use, Bowker (1975) states that it varies according to institution and situation.

There is a paucity of literature concerning the age of initial contact with alcoholic beverages. One study by Mitchell, Kirby, and Mitchell (1970) reported that the mean age of contact for males was 12 years and for females 13.

Studies concerning reasons for drinking and the behavioral consequences of alcohol abuse by college students are also few in number. While research studies are limited, there appears to be some general consensus on the reasons why college students drink. Horowitz and Sedlacek (1973) found that most students drink to get high, feel good, and to relieve boredom and anxiety. Similar results were found by Fago and Sedlacek (1975). These researchers reported the reasons given for using alcohol were to get high and feel good, enhance sociability, and to relieve general anxiety, tension, and nervousness. According to Looney (1976) the enjoyment of taste was the most often given reason for drinking, followed in order by the need for sociability; to relieve fatigue or tension; and to get high. An important finding in Looney's study was the fact that 7 percent of the students sampled said they frequently drank to get drunk, and 13 percent said they occasionally did. A similar study by Kuder and

Madson (1976) reported 5 percent of the students surveyed could not stop drinking before they became drunk, and 26 percent reported that they sometimes had trouble controlling their drinking.

The literature points out the social aspects of alcohol use. Kuder and Madson (1976) reported that students drink primarily because of the important role that alcoholic beverages played in many of the social aspects of campus life. Students reported that in almost half of the social events attended alcoholic beverages were present.

There appears to be conflicting data regarding the effect of alcohol usage on students' academic careers. Kuder and Madson (1976) indicated that most students report that their drinking never interferes with their academic work. However, Blum (1969) and Johnston (1973) found that alcohol had a negative effect on grades. According to Looney (1976), in approximately 5 percent of the cases studied, alcohol did interfere with class attendance and preparations for exams. Further evidence also indicated that the use of alcohol created conflicts in personal relationships.

The use and abuse of alcohol by various segments of the population, including college students, continues to be a national problem. Public officials, as well as educators, have aired their concern about alcohol abuse through statements calling for public action to control and prevent the spread of alcoholism. The primary response to the general concern about alcohol abuse has been the implementation of alcohol education programs. Most programs, however, are based on hunches, biases, moral judgments, as well as cursory inade-

quate data.

The question arises as to whether an alcohol education program is worthwhile because drinking attitudes have already been established by the time a person enters college. This is probably true in most cases and, in fact, a recent study by Jessor and Jessor (1975) confirmed that alcohol use was almost universal on the college campus. The Jessors point out, however, that while the decision to drink or not to drink has already been made by most college students, the choice of how to drink remains.

Roe (1973) writes that the symptoms of alcoholism may be apparent ten years before the victim admits his problem. She cites the fact that Alcoholics Anonymous states that a majority of their clients are in their thirties and forties, but persons in their twenties can be recognized as alcoholics, and their problems in the early phases can be detected. This means that many college age students, who are forming their drinking patterns, are exhibiting the symptoms of the potential or confirmed alcoholic.

Colleges and universities should be interested and concerned about preventative approaches to alcohol abuse in addition to treatment programs for problem drinkers. In a survey of Association of College and University Housing Officers, member institutions showed that 79 percent had drug abuse programs for their residence halls, but few programs included alcohol abuse (Department of Health Education and Welfare, 1971). Roe (1973) points out that statistics would indicate that far more educational programming is warranted in the use of alcohol than in marijuana or narcotics.

The fundamental goals of this study were two-fold: first, to add to the limited body of research knowledge that is available on the incidence of alcohol usage by college students in general, and second, to provide a background of specific information concerning the pattern and reasons for student alcohol use at West Chester State College. Drinking patterns, in terms of preference, frequency, and amount were analyzed in relationship to sex differences and class standing. The reasons for drinking and the resultant behavior of alcohol abuse were also evaluated.

The investigation was conducted as part of a module of study on societal factors for Nova University. One of the objectives of the module was to examine current major social problems and to explore their impact on the institution of education (Matson, 1974). While the problem of alcohol abuse seems to pervade the entire society, the problem was explored with special reference to strategies of change which may be especially appropriate for use with college and university students.

Roe (1973) writes that few Americans would appear to know many facts about alcohol and its use. It is not surprising that few college students know how to drink and how to recognize the danger signals of addiction. The need is warranted for educational programming in the use of alcohol. It is hoped that the results of this study will lead to appropriate alcohol awareness and education programs for students at West Chester.

PROCEDURES

The purpose of this study was to determine patterns of alcohol usage and related behavior of resident students at West Chester State College. The study was an attempt to analyze the type of alcoholic beverages preferred by college students, the frequency of use, the amount consumed, and the age of introductory use of alcohol.

In order to collect data on this problem, a survey using a 34 item questionnaire was conducted. A copy of the questionnaire appears in Appendix A. The items in the questionnaire were taken from instruments originally developed by Engs (1975) and Looney (1976). The National Institute of Alcohol Abuse and Alcoholism has recommended the use of these instruments and has tested them in their nationwide "50 + 12 Project" on college alcohol abuse. This project involved the study of drinking habits of more than 1600 students at one university in each of the 50 states, plus 12 private or minority schools.

Since the survey instrument for this study included items from both Looney and Engs' work, the content validity for the questionnaire was determined by standard procedures (Cronbach, 1960). A series of items were selected that reflected the information thought necessary to study the problem of alcohol use on West Chester's campus. The questions were then reviewed by members of the Student Affairs Division. Based on recommendations from this counsel, the

items in the original questionnaire were identified.

This form of the instrument was then pretested on a small group of students who serve in the Residence Hall Association governing council. In addition to completing the questionnaire, the respondents were asked to provide comments about the instructions, questions, and nature of the study. By using the representatives to the Residence Hall Association to pretest the instrument, the writer was able to establish a base of support and trust level for conducting this type of research in the residence halls. Based on feedback from this group, the final form was developed. The final form was also reviewed by the Director of Institutional Research to ascertain that the requested responses would lend themselves to the use of computer scoring.

The reliability, or the internal consistency of the questionnaire, was more difficult to determine. The nature of the instrument does not lend itself to the usual methods (i.e. equivalent forms, split half, or test-retest) of analyzing the reliability (Tyler, 1963). Therefore, the reliability of the questionnaire was not determined in any systematic way due to the nature of the items and the time frame of the study. However, informal feedback by participants in the study, resident assistants, resident directors, and student leaders, generally supported the results obtained on the questionnaire.

A random sample representing 10% of all students living in each of the 8 residence halls during the spring semester of 1978 served as the subjects of this investigation. Approximately 3100 students live on campus. The sample was

obtained by taking every tenth name from the housing lists in each dormitory.

A copy of the questionnaire, a cover letter (See Appendix B), and a 3 x 5 card with the student's name printed on it were mailed to each student in the sample. A total of 310 students were asked to participate in the study. Students were asked to return their completed questionnaire and name card to the office of their resident director. The name cards provided a means of follow-up that protected the respondents' anonymity.

Results were tabulated on a numerical and percentage basis and then statistically analyzed. A comparison was made of the relationship between selected demographic variables and the use of alcohol by college students.

The Chi Square Test was used to analyze the relationship of sex and class standing with the use and non-use of alcohol and a preference for beer, wine, or alcohol. Sex differences on age of initial use was also tested using this test. The Chi Square Test is a non-parametric statistical technique used for testing hypotheses about distributions of nominal and higher order data. The Chi Square Test is appropriate for testing differences between two or more independent samples. Essentially the Chi Square Test is a test of independence as well as difference (Roscoe, 1975).

The analysis consisted of comparing the frequency of use and the amount of alcohol consumed with the independent variables of sex and class standing. These distributions were tested for significant differences using the Mann-Whitney U-Test and the Kruskal-Wallis Test.

Sex differences in the frequency and extent of alcohol use were tested with the Mann-Whitney U-Test. The Mann-Whitney U-Test is a non-parametric alternative to the t-Test. The U-Test may be used when independent random samples are drawn from two different parent populations and compared on a single criterion to determine whether the two populations differ. The Mann-Whitney requires data on an ordinal scale that is assumed to be continuously distributed. It does not require normality of distribution nor homogeneity of variance for the groups under study. A normal approximation (z score) is calculated from the value of U and interpreted using a table of normal probability (Roscoe, 1975).

An analysis of differences in class standing in relationship to the frequency and amount of alcoholic beverages used was made using the Kruskal-Wallis Test. The Kruskal-Wallis Test is a non-parametric alternative to the one-way analysis of variance. It may be used on ex post facto research; it does not require normality of distribution nor homogeneity of variance for the groups under study. The test is appropriate for data that exists on an ordinal scale. A Chi-Square approximation of the Kruskal-Wallis was used in the analysis (Roscoe, 1975).

The reasons given by the subjects for drinking were presented in rank order of importance for both males and females. The behavior results of alcohol abuse were also presented in rank order for both sexes.

For the purpose of this research the frequency of drinking was defined on a scale using five categories: every

day; at least once a week but not every day; at least once a month but less than once a week; more than once a year but less than once a month; and once a year or less. The extent of alcohol use was examined by measuring the amount of beer, wine, and liquor usually consumed at any one time on a scale of five categories. The categories were: over 6 drinks, 5 or 6 drinks, 3 or 4 drinks, 1 or 2 drinks, and less than 1 drink. A single serving was considered as a can or tavern glass of beer, a glass of wine, or a one ounce "shot" of liquor or mixed drink.

For purposes of statistical analysis the five categories for frequency of use and the five categories measuring the amount of alcohol consumed were converted to ordinal categories. A value of 5 was assigned to the categories indicating the highest frequency and amount. The values of 4, 3, 2, and 1 were assigned to the remaining categories indicating decreasing frequency and amounts.

The following null hypotheses were tested:

(1) There is no significant difference between males and females in the use of alcohol.

(2) There are no significant differences between freshmen, sophomores, juniors, and seniors in the use of alcohol.

(3) There is no significant difference between males and females and the preference for beer, wine, or liquor.

(4) There are no significant differences between freshmen, sophomores, juniors, and seniors and the preference for beer, wine, or liquor.

(5) There is no significant difference between males

and females and the frequency of drinking the following: (1) beer, (2) wine, or (3) liquor.

(6) There are no significant differences between freshmen, sophomores, juniors, and seniors and the frequency of drinking the following: (1) beer, (2) wine, or (3) liquor.

(7) There is no significant difference between males and females and the amount of (1) beer, (2) wine, or (3) liquor consumed.

(8) There are no significant differences between freshmen, sophomores, juniors, and seniors and the amount of (1) beer, (2) wine, or (3) liquor consumed.

(9) There is no significant difference between males and females and age of initial use of alcohol.

The criterion for significance was set at the .05 level.

Variables that cannot be controlled are a part of any research project. There are circumstances or conditions which place certain restrictions upon the validity, reliability, applicability, or general usefulness of the results. A number of limitations applied to the investigation.

A basic problem encountered when using any survey questionnaire is the honesty of the respondents. This limitation is further compounded by the nature of the information sought in this study. The legal drinking age in Pennsylvania is twenty-one, and the college has a regulation prohibiting the use and possession of alcoholic beverages on campus. While every effort was made to protect the students' anonymity, these factors may have caused some respondents, especially those illegally using alcohol, to be suspect and fearful

of disciplinary action taken as a result of truthful responses.

In any questionnaire study there will always be a percentage of nonresponding subjects. A question arises as to how the results might be changed if all the subjects had responded. Another limitation is that the instrument used to study drinking habits lacked extensive statistical analysis of its reliability.

Finally, the results did not permit generalization beyond the particular group of students involved in the investigation. There was no external validity to the study. Results were unique only to resident students at West Chester State College.

All research projects, whether statistical or descriptive, must involve a number of assumptions. For the purpose of this study, it was assumed that the data collecting device, the instructions, and the covering letter were structured in a manner that would not obtain biased results. It was further assumed that the responses of the students represent a valid and representative picture of the extent of alcohol use and abuse on the campus. It was not assumed that the investigation would provide universal results, but rather the study was an attempt to obtain data that could lead to the development of educational and counseling programs leading to responsible drinking by students at West Chester State College.

RESULTS

A total of 177 or 56 percent of the 314 questionnaires distributed were returned. The demographic characteristics of the sample appear in Table 1.

Table 1

Demographic Characteristics of Respondents To Alcohol Survey

Characteristics		N	%
Sex:			
Male		67	37.9
Female		110	62.1
	Total	177	100.0
Class Standing:			
Freshman		46	26.0
Sophomore		53	29.9
Junior		51	28.8
Senior		27	15.3
	Total	177	100.0
Age:			
17 or under		11	6.2
18		35	19.8
19		46	26.0
20		53	29.9
21 or over		32	18.1
	Total	177	100.0

A breakdown by sex of the respondents indicated that 62.1 percent (N = 110) were females and 37.9 percent (N = 67) males. This ratio of females to males followed closely the proportion of women to men living in the residence halls. The

proportion of females to males residing in college owned dormitories at the time of the study was 2 to 1.

An analysis of the class standing of the students responding indicated that 26 percent (N = 46) were freshmen, 29.9 percent (N = 53) sophomores, 28.8 percent (N = 51) juniors, and 15.3 percent (N = 27) seniors. Based on housing statistics during the spring semester 1978, this breakdown followed the ratio of class representation in the residence halls with the exception of the freshman class. The sample contained only 26 percent freshmen, while first year students composed 41 percent of the residents living on campus.

The age breakdown of the respondents indicated that 18.1 percent (N = 32) were 21 years of age or older, with the remainder of the sample (81.9%) being under the age of 21. The age classification of those under 21 was as follows: 6.2 percent (N = 11) 17 or under, 19.8 percent (N = 35) 18, 26 percent (N = 46) 19, and 29.9 percent (N = 53) 20 years old.

Results of the investigation showed that 9.6 percent of the students reported that they did not use any form of alcoholic beverages. A total of 90.4 percent of the respondents indicated that they consumed alcohol in some form, in various amounts, with some degree of frequency. Table 2 shows the comparative use of alcohol by sex. A total of 100 females (90.9%) and 60 males (89.6%) indicated that they used some form of alcohol. Ten females (9.1%) and 7 males (10.4%) reported that they did not drink alcoholic beverages. Sex difference in the use and non-use of alcohol was tested at the .05 level of significance, using the Chi Square statistic.

No significant difference was found ($X^2 = .31$, 1 df, $p > .05$).

Table 2

Proportion of Alcohol Users to Non-Users According to Sex

	Users		Non-Users	
	N	%	N	%
Male	60	89.6	7	10.4
Female	100	90.9	10	9.1
Total	160	90.4	17	9.6

Table 3 reflects the proportion of users to non-users according to class standing. The proportion of users in the freshman (93.5%), sophomore (92.5%), and junior (90.2%) classes was approximately the same. The percentage of users in the senior class, however, was only 81.5 percent. The relationship between class standing and the use and non-use of alcohol was tested at the .05 level and no significant differences were found ($X^2 = 3.23$, 3 df, $p > .05$).

Table 3

Proportion of Alcohol Users to Non-Users According to Class Standing

	Users		Non-Users		X^2
	N	%	N	%	
Freshmen	43	93.5	3	6.5	
Sophomores	49	92.5	4	7.5	3.23
Juniors	46	90.2	5	9.8	
Seniors	22	81.5	5	18.5	
Total	160	90.4	17	9.6	

Table 4 indicates the differences in preference for various types of alcoholic beverages between males and females. Beer was the primary form of alcoholic beverage chosen by males (86.6%). Approximately half (51.8%) of the females expressed a preference for beer. No males indicated a preference for wine, while 10.9 percent of the females chose this form of alcohol. Females outnumbered males 30 (27.3%) to 2 (3%) in the choice of liquor as the preferred alcoholic beverage. The data gathered on preferences were analyzed to determine if any significant differences existed between males and females. A significant difference ($X^2 = 28.66$, 2 df, $p < .001$) was found, and the null hypothesis that no difference occurred was rejected. In analyzing the differences between males and females it was determined that males favored beer to wine or liquor, while females preferred wine or liquor to beer.

Table 4

Preference for Beer, Wine, or Liquor
According to Sex

	Beer		Wine		Liquor		No Preference		X^2
	N	%	N	%	N	%	N	%	
Male	58	86.6	0	0	2	3.0	7	10.4	28.66*
Female	57	51.8	12	10.9	30	27.3	11	10.0	
Total	115	65.0	12	6.8	32	18.1	18	10.2	

* $p < .001$

Table 5 shows the comparative preferences for beer, wine, and liquor according to class standing. Beer was the primary choice by the majority of members for each of the four classes. Sixty-five percent of all the students chose beer. Almost three-fourths (73.9%) of the freshmen picked beer. This beverage was the choice of 67.9 percent of the sophomores, 60.8 percent of the juniors, and 51.9 percent of the seniors.

Liquor was the second preference for all students. A total of 18.1 percent expressed a preference for this form of alcohol. While the percentage of beer drinkers was lowest among seniors, the use of liquor was highest (25.9%) among this class. The second highest preference for liquor was reported by the sophomore class (18.9%). Approximately 15 percent of the freshman (15.2%) and junior (15.7%) classes chose liquor as their preferred form of alcohol.

Wine was the least preferred form of alcohol. Only 6.8 percent of the students chose wine. Representatives of

the junior class (11.8%) reported the highest preference for wine with the sophomores (5.7%), freshmen (4.3%), and seniors (3.7%) in descending order.

Table 5

Preference for Beer, Wine, or Liquor According to Class Standing

	Beer		Wine		Liquor		No Preference		X^2
	N	%	N	%	N	%	N	%	
Freshmen	34	73.9	2	4.3	7	15.2	3	6.5	
Sophomores	36	67.9	3	5.7	10	18.9	4	7.5	5.38
Juniors	31	60.8	6	11.8	8	15.7	6	11.8	
Seniors	14	51.9	1	3.7	7	25.9	5	18.5	
Total	115	65.0	12	6.8	32	18.1	18	10.2	

A statistical analysis of the differences indicated no significance in the preferences between the four classes ($X^2 = 5.38$, 6 df, $p > .05$). The null hypothesis that no differences existed could not be rejected.

The frequency with which alcoholic beverages were consumed by males and females is presented in Table 6. In general male respondents reported drinking more frequently than females. The results also indicated that students drink beer with a greater frequency than wine or liquor.

Six percent of the males stated that they drank beer every day. One female reported drinking liquor every day, and one male reported using wine every day. A total of 61.2 percent of the males said they drank beer at least once a week but not every day. Approximately one-fourth (25.5%) of the females reported drinking beer with the same frequency.

Wine was consumed by 3 percent of the males and 3.6 percent of the females on a frequency of "once a week but not every day." Nine percent of the males drank liquor at least once a week or more, and 9.1 percent of the females used liquor at the same rate.

The category that involved drinking "once a month but less than once a week" was selected by the highest number of students. A total of 29.4 percent reported drinking beer, 26.6 percent wine, and 38.4 percent liquor at this rate. The next highest selected category of drinking frequency was the one which involved drinking "more than once a year but less than once a month." This category included 11.3 percent beer drinkers, 37.9 percent wine users, and 29.9 percent liquor consumers.

The differences in frequency of use according to sex for beer, wine, and liquor were tested at the .05 level of significance, using the Mann-Whitney U-Test. A significant difference was found ($z = 4.90$, $p < .01$) between the frequency of use between males and females for beer. Therefore, the null hypothesis that no difference existed between males and females for that beverage was rejected. No significant difference was found between males and females for the frequency of drinking wine ($z = .77$, $p > .05$) and liquor ($z = .51$, $p > .05$).

Table 6

Frequency of Alcoholic Beverages Consumed According to Sex

	Every Day		Once a Week But Not Every Day		Once a Month But Less Than Once a Week		More Than Once a Year But Less Than Once a Month		Once a Year		No Response		z Score
	N	%	N	%	N	%	N	%	N	%	N	%	
Beer													
Male	4	6.0	41	61.2	12	17.9	3	4.5	0	0	7	10.4	4.99*
Female	0	0	28	25.5	40	36.4	17	15.5	4	3.6	21	19.1	
Total	4	2.3	69	39.0	52	29.4	20	11.3	4	2.3	28	15.8	
Wine													
Male	1	1.5	2	3.0	18	26.9	20	29.9	7	10.4	19	28.4	.77
Female	0	0	4	3.6	29	26.4	47	42.7	14	12.7	16	14.5	
Total	1	.6	6	3.4	47	26.6	67	37.9	21	11.9	35	19.8	
Liquor													
Male	0	0	6	9.0	21	31.3	20	29.9	4	6.0	16	23.9	.51
Female	1	.9	10	9.1	47	42.7	33	30.0	7	6.4	12	10.9	
Total	1	.6	16	9.0	68	38.4	53	29.9	11	6.2	28	15.8	

* $p < .01$

The relationship between class standing and the frequency with which alcoholic beverages were consumed is presented in Table 7. Among the 6 students who reported drinking "every day," 3 were from the freshman class. One from each of the other three classes made up the remainder of the "every day" drinkers. In the two highest categories of use freshmen drank beer (47.9%) and wine (8.7%) with a greater frequency than members of the other classes. In the case of liquor, sophomore drinkers (15.1%) reported the highest frequency of use.

The category chosen by most beer drinkers for all four classes was the one that involved "drinking once a week but not every day." Wine was consumed by the largest percentage of students at a rate of "more than once a year but less than once a month." Liquor was used more frequently than wine but not as often as beer. The category chosen by most users of liquor involved drinking "once a month but less than once a week."

The data collected on the frequency of alcohol consumed according to class standing was analyzed using the Chi Square approximation of the Kruskal-Wallis Test. No significant statistical differences were found between the four classes and the frequency with which members of each class used beer ($X^2 = 1.42$, 3 df, $p > .05$), wine ($X^2 = .95$, 3 df, $p > .05$), and liquor ($X^2 = 4.21$, 3 df, $p > .05$).

Table 7

Frequency of Alcoholic Beverages Consumed
According to Class Standing

	Every Day		Once a Week But Not Every Day		Once a Month But Less Than Once a Week		More Than Once a Year But Less Than Once a Month		Once a Year or Less		No Response		Kruskal-Wallis X^2
	N	%	N	%	N	%	N	%	N	%	N	%	
Beer													
Freshmen	1	2.2	21	45.7	16	34.8	4	8.7	0	0	4	8.7	
Sophomores	1	1.9	22	41.5	16	30.2	5	9.4	1	1.9	8	15.1	1.42
Juniors	1	2.0	18	35.3	17	33.3	4	7.8	3	5.9	8	15.7	
Seniors	1	3.7	8	29.6	3	11.1	7	25.9	0	0	8	29.6	
Wine													
Freshmen	1	2.2	3	6.5	12	26.1	16	34.8	6	13.0	8	17.4	
Sophomores	0	0	2	3.8	13	24.5	22	41.5	6	11.3	10	18.9	.95
Juniors	0	0	0	0	14	27.5	22	43.1	6	11.8	9	17.6	
Seniors	0	0	1	3.7	8	29.6	7	25.9	3	11.1	8	29.6	
Liquor													
Freshmen	1	2.2	3	6.5	17	37.0	15	32.6	1	2.2	9	19.6	
Sophomores	0	0	8	15.1	19	35.8	15	28.3	3	5.7	8	15.1	4.21
Juniors	0	0	3	5.9	18	35.3	20	39.2	5	9.8	5	9.8	
Seniors	0	0	2	7.4	14	51.9	3	11.1	2	7.4	6	22.2	

Results of the study that demonstrated the amount of alcoholic beverages consumed at one time by males and females is reported in Table 8. The data presented in this table indicates that males drank more at one sitting than females. Results showed that 38.8 percent of the males consumed at least 5 twelve ounce servings of beer at one time interval. Similarly, 16.5 percent of the males reported consuming 5 or more glasses of wine at one sitting, and 23.9 percent of the men reported drinking 5 or more drinks containing one ounce of liquor. In contrast, the percentages of females who consumed this amount of liquor were: 16.3 percent (beer), 7.3 percent (wine), and 10 percent (liquor).

In the category of "3 to 4 drinks per sitting" the percentage of males and females was approximately the same for beer and wine. However, for liquor females exceeded males by about 10 percent. In the combined categories of 2 or less drinks per sitting women outnumbered men for all forms of alcoholic beverages.

The relationship between sex and the amount of beer, wine, and liquor consumed at one time period was analyzed using the Mann-Whitney U-Test. Significant differences at the .01 percent level were found between males and females for all three beverages. The null hypotheses that there were no significant differences between males and females and the amount of beer, wine, and liquor consumed were all rejected. An analysis of these differences indicated that males tended to drink more at one sitting than did females.

Table 8

Amount of Alcoholic Beverages Consumed at One Sitting According to Sex

	Number of Drinks												
	More Than 6		5-6		3-4		1-2		Less Than 1		No Response		Mann-Whitney z Score
	N	%	N	%	N	%	N	%	N	%	N	%	
Beer													
Male	12	17.9	14	20.9	21	31.3	12	17.9	1	1.5	7	10.4	3.40*
Female	4	3.6	14	12.7	34	30.9	28	25.5	9	8.2	21	19.1	
Total	16	9.0	28	15.8	55	31.1	40	22.6	10	5.6	28	15.8	
Wine													
Male	6	9.0	5	7.5	12	17.9	20	29.9	5	7.5	19	28.4	2.42*
Female	1	.9	7	6.4	16	14.5	56	50.9	14	12.7	16	14.5	
Total	7	4.0	12	6.8	28	15.8	76	42.9	19	10.7	35	19.8	
Liquor													
Male	5	7.5	11	16.4	18	26.9	15	22.4	2	3.0	16	23.9	2.30*
Female	3	2.7	8	7.3	40	36.4	43	39.1	4	3.6	12	10.9	
Total	8	4.5	19	10.7	58	32.8	58	32.8	6	3.4	28	15.8	

Table 9 reports on the amount of beer, wine, and liquor consumed at one sitting by freshmen, sophomores, juniors, and seniors. No apparent trends appear when analyzing the table. The class with the highest percentage of respondents differec with each category of amount and for each type of beverage. A statistical analysis using the Kruskal-Wallis statistic supported this finding. When tested at the .05 level of significance, no significant differences were found, and the null hypotheses testing difference between class standing and quantity consumed could not be rejected.

Although the time of initial alcohol use varied between males and females, the results of the study indicated males, in general, started to drink at an earlier age than females (Table 10). All the males responding to the question concerning the age of initial use had started drinking by the end of the freshman year. In contrast, 4.5 percent of the females responding said they began in the sophomore year, and 1 female (.9%) started as late as the junior year. Approximately 21 percent of the males started consuming alcohol in junior high school as compared to 15.5 percent of the females who started at the same time. The majority of the students surveyed started drinking in high school. A total of 62.7 percent of the males and 54.5 percent of the females began drinking during this period of time. By the start of college 83.6 percent of the males had started to use alcohol. In contrast, only 10 percent of the females had started before entering college, and 16.4 percent stated that they began drinking in the first year of college and 4.5 percent in the second year.

The differences in initial age were tested at the .05

Table 9

Amount of Alcoholic Beverages Consumed at One Sitting According to Class Standing

	Number of Drinks												Kruskal-Wallis X^2
	More Than 6		5-6		3-4		1-2		Less Than 1		No Response		
	N	%	N	%	N	%	N	%	N	%	N	%	
Beer													
Freshmen	5	10.9	7	15.2	20	43.5	8	17.4	2	4.3	4	8.7	
Sophomores	5	9.4	10	18.9	13	24.5	16	30.2	1	1.9	8	15.1	1.44
Juniors	5	9.8	7	13.7	16	31.4	11	21.6	4	7.8	8	15.7	
Seniors	1	3.7	4	14.8	6	22.2	5	18.5	3	11.1	8	29.6	
Wine													
Freshmen	2	4.3	3	6.5	10	21.7	19	41.3	4	8.7	8	17.4	
Sophomores	2	3.8	6	11.3	6	11.3	22	41.5	7	13.2	10	18.9	.76
Juniors	3	5.9	2	3.9	8	15.7	23	45.1	6	11.8	9	17.6	
Seniors	0	0	1	3.7	4	14.8	12	44.4	2	7.4	8	29.6	
Liquor													
Freshmen	6	13.0	3	6.5	16	34.8	12	26.1	0	0	9	19.6	
Sophomores	1	1.9	6	11.3	21	39.6	15	28.3	2	3.8	8	15.1	7.72
Juniors	1	2.0	9	17.6	15	29.4	19	37.3	2	3.9	5	9.8	
Seniors	0	0	1	3.7	6	22.2	12	44.4	2	7.4	6	22.2	

Table 10

Age of Initial Alcohol Use According to Sex

	Jr.H.S.		H.S.		College						No Response		X^2
					Frosh.		Soph.		Jr.				
	N	%	N	%	N	%	N	%	N	%	N	%	
Male	14	20.9	42	62.7	3	4.5	0	0	0	0	8	11.9	9.83*
Female	17	15.5	60	54.5	18	16.4	5	4.5	1	.9	9	8.2	
Total	31	17.5	102	57.6	21	11.9	5	2.8	1	.6	17	9.6	

* $p > .05$

level of significance using the Chi Square statistic. A significant difference ($X^2 = 9.83$, 4 df, $p > .05$) was found, thus necessitating a rejection of the null hypotheses that no significant difference occurred between men and women in regards to the age of initial consumption of alcohol.

Table 11 shows the ranking of the most frequently given reasons by males and females for the use of alcoholic beverages. The two reasons given the most for the use of alcohol were sociability and "enjoyment of taste." "Sociability" ranked highest for both men and women with 70.1 percent of the males and 73.6 percent of the females listing this reason first. The second highest chosen reason was the "enjoyment of taste." A total of 64.2 percent of the males and 68.2 percent of the females selected this reason.

The ranking of the remaining reasons varied slightly between the two sexes. Overall, the "relief of fatigue and tension" ranked third (28.2%) and "to get drunk" was the fourth highest reason given (25.4%). The goal of drinking to get drunk ranked third for men and fourth for women. A total of 31.3 percent of the males reported drinking to get drunk, and 21.8 percent of the females gave the same response. The other reason in which males and females differed somewhat greater than others was "the use of alcohol to get along on dates." This reason ranked sixth for men and ninth for women. Almost 15 percent of the males gave this reason as compared to only 1.8 percent of the females.

Table 11

Reasons for Using Alcohol According to Sex

Reason	Male		Female		Total	
	N	%	N	%	N	%
Sociability	47	70.1	81	73.6	128	72.3
Enjoyment of Taste	43	64.2	75	68.2	118	66.7
Relieve Fatigue or Tension	20	29.9	30	27.3	50	28.2
To Get Drunk	21	31.3	24	21.8	45	25.4
To Get High	12	17.9	11	10.0	23	13.0
To Forget Disappointments	7	10.4	13	11.8	20	11.3
Sense of Well-Being	8	11.9	7	6.4	15	8.5
To Get Along on Dates	10	14.9	2	1.8	12	6.8
In Order Not to be Shy	5	7.5	7	6.4	12	6.8
Aches and Pains	2	3.0	6	5.5	8	4.5
To Facilitate Study	3	4.5	0	0	3	1.7

The responses concerning the results of alcohol abuse by males and females appears in Table 12. The primary effect of alcohol abuse appeared to result in sickness. This result ranked first for both males and females. Approximately half the males (53.7%) and females (46.4%) reported this effect from alcohol use. The second highest recorded effect from over use was the interference with class attendance. About one-fourth of the men (23.9%) and 10 percent of the women reported this problem. The conflicts alcohol caused with friends of the opposite sex was the third highest problem cited. The major difference between the sexes in problems created by alcohol use was the degree of involvement with the law. Almost twice as many males (13.4%) as women (3.6%) report that alcohol had gotten them in trouble with the law. A total of 7.9 percent of the respondents reported having an accident or injury as a result of overindulging with alcohol.

Table 12

Results of Alcohol Abuse According to Sex

Results	Males		Females		Total	
	N	%	N	%	N	%
Sickness	36	53.7	51	46.4	87	49.2
Interference With Class Attendance	16	23.9	11	10.0	24	15.3
Conflict With Friends-Opposite Sex	11	16.4	10	9.1	21	11.9
Conflict With Friends-Same Sex	7	10.4	7	6.4	14	7.9
Accident or Injury	6	9.0	8	7.3	14	7.9
Trouble With the Law	9	13.4	4	3.6	13	7.3
Foregoing of Other Things Due to Cost of Drinking	3	4.5	5	4.5	8	4.5
Damaged Friendships	1	1.5	3	2.7	4	2.3
Missed Appointments	3	4.5	1	.9	4	2.3
Interference With Preparing for Exams	3	4.5	0	0	3	1.7
Loss of Job	0	0	0	0	0	0

DISCUSSION, IMPLICATIONS, AND RECOMMENDATIONS

The investigation sought to determine the drinking habits of resident students at West Chester State College. An analysis of the data obtained in the study revealed that West Chester students have drinking habits similar to students from various colleges and universities examined by different researchers. The students at West Chester do not appear to drink in any greater numbers, nor are their habits concerning frequency, amounts consumed, or reasons for drinking systematically different from students on other campuses. While the drinking habits of West Chester students may not differ appreciably from those of students studied on other campuses, a look at the results indicate that the college would be remiss if it did not give serious consideration to the development and implementation of some type of alcohol awareness program.

The percentage of returned questionnaires was disappointing. A higher return rate had been expected. The lower than anticipated return might be explained by two factors. First, the college has a regulation which prohibits the possession or use of alcohol on campus, and the inquiry may have been viewed with suspicion by students, even though anonymity was assured. Secondly, the college is preparing for an upcoming Middle States evaluation, and the students have been asked to complete a number of surveys during the last few months as part of the institution's self-study. According to

several resident directors, the students are growing somewhat resistant to completing surveys.

The data analyzed in this study revealed that 90 percent of the resident students at West Chester used some form of alcohol in varying amounts and frequencies. Those results were consistent with those in national studies (Kraft, 1976 and Madson, 1976) which reported that 70 to 95 percent of all college students drink at least occasionally. The results also supported the previous research of Smith (1970), Dvorak (1972), Levy (1973), and Walsh and Frantz (1972) which found no significant differences between users and non-users with regards to sex.

While there was no statistical difference between male and female users and non-users, results of the study did indicate a number of differences in the drinking habits of men and women who did consume alcohol. The study indicated that men chose beer as their preferred form of alcohol, while women preferred wine or liquor. Results also demonstrated that men drank beer more frequently and in greater amounts at one sitting than did women. Males and females did not differ in the frequency with which wine and liquor were consumed; however, men did drink a significantly greater amount per sitting of these two forms of alcohol.

Sex differences were also noted in the age of initial contact with alcohol. A tendency for males to start using alcohol at an earlier age than females was revealed by the results. These findings were similar to those found by Mitchell, Kirby, and Mitchell (1970).

An analysis of the data using class standing as a

variable produced findings which showed no significant differences between consumers of alcohol and non-users. Further analysis also showed no difference between class standing and the amounts or frequencies with which beer, wine, and alcohol were consumed. These findings support Bowker's (1975) position that the relationship between class standing and alcohol use varies according to institution and situation.

The findings when analyzed according to year in college revealed that students at West Chester differed from students at other colleges previously studied by Gusfield (1970) and DeCoster, Engs, Larson, and McPheron (1976). While these researchers found an increase in use of alcohol as students rise from the freshman to the senior year, this study indicated the reverse. The use of alcohol by students in this study actually decreased with each succeeding year in college.

An analysis of the frequencies with which alcoholic beverages were used and the amount of alcohol consumed at one sitting indicated that moderate to heavy drinking was relatively common. Approximately 40 percent of the students used alcohol on at least a weekly basis, and 1 out of 4 students drank at least 5 servings at a sitting. The amount of blood alcohol concentration (B.A.C.) this number of drinks would produce reaches the legal definition of intoxication which is defined as a B.A.C. greater than 0.10 percent.

Another interesting statistic obtained from the study concerned the age of the subjects and the percentage that drink. Only 18 percent of the sample were 21 or over and, thus, legally qualified to drink in Pennsylvania. Yet,

90 percent of the students surveyed said they drank. The conclusion reached is that most of the students who drink are doing it illegally. This finding has implication for legislators considering changes in the state drinking code.

The data collected supports previous findings in the literature concerning the reasons students use alcohol and the results of overindulgence. The primary reasons given for using alcohol were to enhance sociability, to relieve general anxiety and fatigue, and for the enjoyment of the taste of alcohol. These results were similar to those obtained by Horowitz and Sedlacek (1973), Fago and Sedlacek (1975), and Looney (1976). A disturbing situation which was discovered in this phase of the study was the fact that one-fourth of the students surveyed indicated they drank for the purpose of getting drunk. This finding has rather serious implications and substantiates the need for some type of preventative program in the area of alcohol abuse.

The need for such programming becomes further apparent when the results of alcohol abuse are reviewed. The study showed that alcohol abuse has led to personal illness, accident, or injury in more than half the students sampled. Overindulgence has created conflict or damaged personal relationships among another one-fourth of the students. Thirteen percent of the males have gotten into trouble with the police as a result of alcohol abuse. From an academic standpoint the misuse of alcohol has interfered with studying and class attendance for 1 out of every 4 males and 1 out of 10 females.

The results of the study support the need for West Chester to pay more attention to students' alcohol consump-

tion. There are a number of implications for the Student Affairs Division as a result of this investigation. Specifically, the division should consider responding in two areas. First, there is a need to develop educational programs that provide in-depth understanding of the physiological and psychological potential and dangers of various drinking habits and patterns. Secondly, if students use alcohol to get high, feel good, and to relieve boredom and anxiety, it may be that the environment does not respond to their needs, in a sense necessitating their turning to alcohol. This finding has implications for those responsible in the Division for planning the extracurricular and social activities on campus.

The findings and their implications lead to several recommendations. First, there is an obvious need for more research. Due to the fact that no previous studies have been conducted on the subject of alcohol usage at West Chester, no conclusions could be reached on the subject of whether or not the use of alcohol on campus is increasing. This study will serve as a data base, and it is recommended that a future study be conducted in order to study any trends. Obviously there is a need for more empirical evidence concerning the reasons for alcohol use and resultant behaviors stemming from overindulgence. It is further recommended that additional research be carried out in this area. Such data would also serve as a base for evaluating the effectiveness of any alcohol education programs developed and implemented. It would also be useful to study the characteristics and behaviors of those individuals whose drinking behaviors point toward potential alcoholism.

Another recommendation is that the results of this study be shared with the directors of orientation, activities, counseling, and residence hall programs so that they and their staffs may become involved with intervening in the socialization process, whereby students learn to be drinkers. These individuals will be asked to develop a program leading to the responsible use of alcohol on campus.

Alcohol abuse education should involve a broad range of concerted activities which attempt to maximize opportunities for the intellectual, emotional, psychological, and physiological development of individuals, and which involves the total educational process embracing both cognitive and affective domains. Such a program should focus on the root causes of alcohol abuse instead of the symptoms.

In reviewing the literature for this study, certain basic criteria for developing an alcohol awareness and education program for college students become evident. The research and writing of Kraft (1970) DeCoster, et al (1976) generally conclude that such a program should be based on the following:

1. The program must contain materials that are factually accurate regarding alcoholic beverages and alcohol use.

2. The program must emphasize responsible drinking behavior rather than advocating abstinence. A decision not to drink, however, should be considered as a legitimate alternative. Positive as well as negative consequences of drinking should be explored.

3. The program should include a cognitive base and then move toward affective considerations. It should demonstrate cultural and social dimensions of alcohol use but also provide students an oppor-

tunity to focus clearly upon the role of alcohol in relation to their personal objectives, life styles, and values.

4. The program must be designed so that it could be presented by paraprofessionals without the necessity to have professional consultants in attendance.

5. The program must be constructed and presented in a way that is intellectually and socially acceptable to young adults.

Responsible use of alcohol (drinking) results from a combination of many factors, none of which is essential or sufficient by itself and all of which vary in importance from one individual to another. But, whatever the particular combination of influences--from self, family, associates or society--responsible drinking is the use of alcohol in ways which harm neither the individual nor society. Responsible drinking practices can prevent alcoholism in many people even if the reasons for drinking differ from person to person. For others, standards of common usage can serve to identify alcohol problems early.

The responsible use of alcohol is not the answer to all alcohol problems, nor is it meant to be so. Much of the causation of alcoholism remains unknown. There will always be persons who are unable, for various reasons, to sustain safe drinking practices regardless of how intense social and other pressures may be upon them. In such cases, abstinence is necessary in order for these individuals to protect their health and well-being. Nevertheless, the approach through responsible drinking practices is intended to aid the majority of people, both those who drink alcohol and those who choose not to drink, by reducing the incidence of problem drinking in the population as a whole.

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APPENDIX A

ALCOHOL QUESTIONNAIRE

The following questions concern the patterns of alcohol usage by resident students on the West Chester State College campus. The answers you give are anonymous. There are no means of tracing or identifying individual answer forms. The total value of this survey depends on the accuracy of your responses and the immediate return of the questionnaire. After completing the questionnaire, please return to your Resident Director's office. Place the questionnaire in the box provided, and then place the 3 x 5 card in the other box. The purpose of the 3 x 5 card is to allow for follow-up of those who forgot to return the questionnaire. Please do not put your name on the questionnaire.

Instructions: Using a soft pencil, circle the appropriate alternative for each question.

1. Sex:
   A. Male
   B. Female

2. Class:
   A. Freshman
   B. Sophomore
   C. Junior
   D. Senior

3. Age:
   A. 17 or under
   B. 18
   C. 19
   D. 20
   E. 21 or over

4. If you never drink alcoholic beverages, not even beer, check A! Thank you for helping in this survey. Please return this questionnaire and 3 x 5 card to the R.D.'s office. If you drink, please go on!
   A. I do not use any form of alcoholic beverages.

5. What kind of alcoholic beverage do you drink most frequently?
   A. Beer
   B. Wine
   C. Liquor

6. Let's first take beer. How often, on the average, do you usually have a beer? (If you do not drink beer at all, go on to question 8.
   A. every day
   B. at least once a week but not every day
   C. at least once a month but less than once a week
   D. more than once a year but less than once a month
   E. once a year or less

7. When you drink beer, how much, on the average, do you usually drink at any one time?
   A. more than 1 six pack (6 or more cans or tavern glasses)
   B. 5 or 6 cans of beer or tavern glasses
   C. 3 or 4 cans of beer or tavern glasses
   D. 1 or 2 cans of beer or tavern glasses
   E. less than 1 can of beer or tavern glass

8. Now let's look at table wine. If you do not drink wine at all, go to question 10. How often do you usually have wine?
   A. every day
   B. at least once a week but not every day
   C. at least once a month but less than once a week
   D. more than once a year but less than once a month
   E. once a year or less

9. When you drink wine, how much, on the average, do you usually drink at any one time?
   A. over 6 wine glasses
   B. 5 or 6 wine glasses
   C. 3 or 4 wine glasses
   D. 1 or 2 wine glasses
   E. less than 1 wine glass of wine

10. Next we would like to ask you about liquor or spirits (whiskey, gin, vodka, mixed drinks, etc.). If you do not drink liquor at all, go to question 12. How often do you usually have a drink of liquor?
   A. every day
   B. at least once a week but not every day
   C. at least once a month but less than once a week
   D. more than once a year but less than once a month
   E. once a year or less

11. When you drink liquor, how many, on the average, drinks do you usually drink at any one time?
   A. over 6 drinks
   B. 5 or 6 drinks
   C. 3 or 4 drinks
   D. 1 or 2 drinks
   E. less than 1 drink

12-22. By circling the appropriate item number, please indicate your reasons for using alcohol. You may circle more than one of the reasons listed below if they apply to your situation.

   Reasons for Drinking:
   12. to facilitate study
   13. to get along better on dates
   14. to relieve fatigue or tension
   15. sociability
   16. for aches and pains
   17. enjoyment of taste

18. in order not to be shy
19. for a sense of well-being
20. as an aid in forgetting disappointments
21. to get high
22. to get drunk

23-33. By circling the appropriate item number, please indicate if your drinking has ever resulted in any of the following problems. You may circle more than one of the following problems if they apply to you.

Has your drinking ever:

23. interfered with your class attendance
24. interfered with your preparation for exams
25. caused conflict with close friends of opposite sex
26. caused conflict with close friends of same sex
27. damaged other friendships
28. caused you to miss appointments
29. caused you to lose a job
30. caused accident or injury
31. caused you to forego other things because of the expense of liquor
32. caused you to get sick
33. caused you to have trouble with the law

34. When did you first start to use alcoholic beverages?
    A. Jr. High School
    B. High School
    C. College Freshman Year
    D. College Sophomore Year
    E. College Junior or Senior Year

APPENDIX B

WEST CHESTER STATE COLLEGE
WEST CHESTER, PENNSYLVANIA

Spring, 1978

Dear Resident Student:

During the last couple of years there have been many varied and conflicting reports concerning student alcohol usage. As many of you may know, there is current legislation proposed to lower the drinking age in Pennsylvania. When such legislation is proposed and reported in the media, people like myself are repeatedly asked about the extent and frequency of use of alcohol. Legislators, community leaders, and representatives of the news media want to know the facts. The Student Affairs Division should be able to respond and to make recommendations concerning these matters.

The attached questionnaire has been developed to objectively evaluate the true incidence of alcohol usage in the residence halls at West Chester. If you would please take a few moments of your time and complete the questions that have been developed, I would be deeply indebted.

Your name was chosen at random from the housing lists for each residence hall. In that the study is completely anonymous, please do not add your name to the questionnaire that you will be returning.

I feel that this study is extremely important to this college and will indicate the true picture of alcohol use. The results, hopefully, will lead to educational and counseling programs for those who may have a problem with alcohol.

Sincerely,

Louis F. Weislogel
Vice President for
Student Affairs